

PATENT CLAIMS

1. An access control system having
- a standard access control system (2-4, 8), via
5 which a large number of access points (1) can each
be controlled via individual physical locking
mechanisms (8), with at least one reader (2) as
well as a controller (3), which is connected to
it, for controlling the locking mechanism (8)
10 being provided at each access point (1), and with
at least one access control server (4) being
provided, which carries out central management of
the access data and is connected to the respective
controllers (3);
 - 15 at least one mobile telephony server (5) connected
to the access control server (4), which is at
least indirectly able to send data via a mobile
telephone network to mobile telephone subscribers
(7), and to receive data from them, in which case
20 this mobile telephony server (5) may also be an
integral component of the access control server
(4);

characterized in that

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- a short-range transmitter (9) is provided at one
specified location and transmits access-point-specific
identification information in such a manner that this
is received by a mobile telephone (7) which is located
30 in the reception area of the transmitter (9), and is
used at least indirectly by this to control the access
control at a specific associated access point (1).

2. The access control system as claimed in claim 1,
35 characterized in that the specified location is a
location in the area of the associated access point
(1), such that the identification information from the
transmitter (9) can be received by the mobile telephone

(7) only in the immediate vicinity of the access point (1).

3. The access control system as claimed in claim 1,
5 characterized in that the specified location is a location in front of the associated access point (1), or is a specific working area.

4. The access control system as claimed in one of the
10 preceding claims, characterized in that the transmitter (9) is a Bluetooth appliance, particularly preferably with a range of less than 10 meters, and in that the authorized mobile telephone (7) has a Bluetooth interface.

15 5. The access control system as claimed in one of the preceding claims, characterized in that the transmitter (9) is a WLAN station, and in that the authorized mobile telephone (7) has a WLAN interface.

20 6. The access control system as claimed in one of the preceding claims, characterized in that the identification information is a hardware-specific, unique address of the transmitter (9), particularly
25 preferably an appliance-specific 48-bit address of a Bluetooth appliance (9), or an address which is specific to a corresponding appliance for a WLAN appliance or a WLAN network.

30 7. The access control system as claimed in one of the preceding claims, characterized in that the transmitter (9) is in the form of an independent unit, which preferably has no direct connection to the standard access control system (2-4, 8) and/or to the mobile
35 telephony server (5).

8. The access control system as claimed in one of the preceding claims, characterized in that the standard

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access control system (2-4, 8) also allows access control using means without mobile telephony (7), in particular based on RFID technology.

5 9. A method for access control, particularly preferably using an access control system as claimed in one of the preceding claims, with

10 a standard access control system (2-4, 8) being provided, via which a large number of access points (1) can each be controlled via individual physical locking mechanisms (8), with at least one reader (2) as well as a controller (3), which is connected to it, preferably being provided in order to control the locking
15 mechanism (8) for each access point (1), and with at least one access control server (4) being provided, which carries out central management of the access data and is connected to the respective controllers (3);

20 and with at least one mobile telephony server (5) being provided, connected to the access control server (4), which is at least indirectly able to send data via a mobile telephone network to mobile telephone subscribers (7), and to receive data from them, in
25 which case this mobile telephony server (5) may also be an integral component of the access control server (4);

characterized in that

30 a short-range transmitter (9) is provided with a specified location, preferably at at least one access point (1), in that

35 a mobile telephone (7) is authorized for access at specific access points (1) in a specific time period via the access control server (4), and/or via the mobile telephony server (5) via the mobile telephone network,

in that the transmitter (9) transmits access-point-specific identification information continuously or at times, in such a manner that it can be received by only
5 a mobile telephone (7) which is located in the reception area of the transmitter,

in that a mobile telephone (7) which is located in the reception area of the transmitter (9) detects the
10 identification of this transmitter (9) via this identification information,

and in that the access point (1) associated with the transmitter (9) is then opened, with direct or indirect
15 use of this identification information, via the mobile telephone (7), the mobile telephone network, the mobile telephony server (5), the access control server (4) and the controller (3).

20 10. The method as claimed in claim 9, characterized in that the transmitter (9) is arranged in the vicinity of the access point (1) in such a manner that the mobile telephone (7) can receive its identification information only in the immediate vicinity of the
25 access point (1).

11. The method as claimed in one of claims 9 or 10, characterized in that, after detection of the identification information, the mobile telephone (7)
30 additionally demands the input of an authentication in particular such as a PIN code, password or biometric information (7), and this user-specific information is transmitted together with the identification of the access point (1) to be processed via the mobile
35 telephone network to the mobile telephony server (5) and to the access control server (4), which then activates the associated controller (3).

12. The method as claimed in one of claims 9-11, characterized in that the mobile telephone (7) transmits the identification information and if appropriate the PIN code via the GSM network in the form of a telephonic data transmission or in the form of an SMS to the access control server (4).

13. The method as claimed in one of claims 7 or 8, characterized in that the transmitter (9) is a Bluetooth appliance or a WLAN appliance (9), which transmits its unique address as identification information, and this address is used to identify the associated access point (1), and in that the mobile telephone (7) has a Bluetooth interface or a WLAN interface, in which case the mobile telephone (7) automatically starts an appropriate dialogue with the mobile telephone user on reception of specific addresses of this type which are transmitted in the course of the authorization process and correspond to the authorized access points (1), possibly requests authentication of the user, and in any case then transmits a request to open the specific access point (1) via the mobile telephone network to the mobile telephony server (5) and to the access control server (4).

14. The method as claimed in one of claims 9-13, characterized in that the transmitter (9) is a Bluetooth appliance or a WLAN appliance (9), which is arranged in the area of the gateway (1) in such a way that the identification information can be received by a mobile telephone (7) only within a distance of less than 1 m, particularly preferably less than 0.5 m outside and in front of the gateway (1).

15. The method as claimed in one of claims 9-14, characterized in that the transmitter (9) is a Bluetooth appliance or a WLAN appliance (9), which is

arranged in a specific area in front of the associated access point (1), or in a working area associated with the access point.

5 16. A time recording system having

- a standard time recording system which comprises at least one time recording server (4) which carries out central management of the time data;

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- at least one mobile telephony server (5) in conjunction with the time recording server (4), which is at least indirectly able to transmit data via a mobile telephone network to mobile telephone subscribers (7), or to receive data from them, in which case this mobile telephony server (5) may also be an integral component of the time recording server (4);

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20 characterized in that

a short-range transmitter (9) is provided for at least one authorized area (1) and transmits area-specific identification information in such a way that it is received only by a mobile telephone (7) which is located in the immediate vicinity of the authorized area (1), and is used by this mobile telephone (7) at least indirectly for the manipulation of the time data.

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30 17. A method for time recording, particularly preferably using a time recording system as claimed in claim 12, with

a standard time recording system which comprises at least one time recording server (4) carrying out central management of the time data,

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and with at least one mobile telephony server (5) in

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conjunction with the time recording server (4), which is at least indirectly able to transmit data via a mobile telephone network to mobile telephone subscribers (7), or to receive data from them, in which
5 case this mobile telephony server (5) may also be an integral component of the time recording server (4);

in that a short-range transmitter (9) is provided for at least one authorized area (1),
10 characterized in that

a mobile telephone (7) is authorized to input time data in specific authorized areas (1), in at least one
15 specific time period, via the time recording server (4) and via the mobile telephony server (5) via the mobile telephone network,

in that the transmitter (9) transmits area-specific
20 identification information continuously or at times, in such a manner that it can be received only by a mobile telephone (7) which is located in the immediate vicinity of the authorized area (1),

25 in that a mobile telephone (7) which is located in the immediate vicinity of the area (1) detects the identification of this area (1) via this identification information,

30 and in that time data is then transmitted to the time recording server (4), and/or is checked by the latter, via the mobile telephone (7), the mobile telephone network and the mobile telephony server (5).

35 18. A data processing program, which can run on a mobile telephone (7), for carrying out a method as claimed in one of claims 9-15, which is designed to transmit identification information, received via a

Bluetooth or WLAN interface, from a transmitter (9), possibly together with additional information requested in a request, such as a PIN code, a password or biometric information, automatically via the GSM
5 network to an access control server (4).

19. A mobile telephone (7) having a data processing program as claimed in claim 18.